

Bladder Stones

Bladder stones are hard masses of minerals in your bladder. Bladder stones develop when urine in your bladder becomes concentrated, causing minerals in your urine to crystalize. Concentrated urine that sits in your bladder for long periods of time is often the result of not completely emptying your bladder.

Symptoms

Symptoms of a bladder stone might include:

- Lower abdominal pain
- Painful urination
- Frequent urination
- Urinary incontinence (inability to control your body's release of urine)
- Difficulty urinating or interruption of urine flow
- Blood in your urine
- Cloudy, pink or abnormally dark-colored urine
- Recurrent urinary tract infections
- In men, pain or discomfort in the penis

The majority of people with bladder stones do experience symptoms. However, some people might never know they have a bladder stone. Some small stones might pass on their own during urination.

Possible Complications

Bladder stones that aren't removed—even those that don't cause symptoms—can lead to:

- **Chronic bladder dysfunction:** Left untreated, bladder stones can cause long-term urinary problems, such as pain and frequent urination. Bladder stones can also lodge in the opening where urine exits the bladder and enters the urethra, thereby blocking urination.
- **Urinary tract infections:** Recurring bacterial infections in your urinary tract can be caused by bladder stones.

Some bladder stones begin as mineral masses in a kidney, then travel into the bladder. Others form right inside the bladder.

Likelihood of Bladder Stones

You have a greater risk of forming bladder stones if you have:

- **Bladder Augmentation:** If you've had a bladder augmentation, tissue from your intestines was used to enlarge your bladder. This tissue continually draws mucus into your urine. If you don't irrigate the mucus out of your bladder daily, the mucus gets concentrated, and it might crystalize to form a bladder stone.
- **Neurogenic bladder:** People with spinal cord injuries, spina bifida, stroke and other neurologic problems can experience damage to nerves that control bladder function. This condition is called a neurogenic bladder. Some people with neurologic bladder might also have an enlarged prostate or other type of bladder outlet obstruction, which further increases their risk of stones.
- **Inflammation:** Bladder stones can develop if your bladder becomes inflamed due to urinary tract infections.
- **Catheterization:** Occasionally, bladder catheters can cause bladder stones because of the irritation to your bladder if the catheter repeatedly hits the bladder wall during catheterization.
- **Kidney stones:** Small stones from your kidney might travel down your ureters into your bladder. If you don't pass these kidney stones with urination, they can crystallize into large bladder stones.

Testing

To find out if you have bladder stones, testing and diagnosis might include:

- **Analysis of your urine (urinalysis):** A sample of your urine is collected and examined for microscopic amounts of blood, bacteria and crystalized materials.
- **Spiral computerized tomography (CT) scan:** A CT scan combines multiple X-rays with computer technology to create cross-sectional images of your body. A spiral CT is a sensitive test that can detect even very small bladder stones.
- **Ultrasound:** An ultrasound bounces sound waves off organs and structures in your body, creating pictures that help detect bladder stones.
- **X-Ray:** An X-ray of your kidneys, ureters and bladder might help determine whether stones are present in your urinary system. Some types of bladder stones are not visible on X-rays.

Treatments

Bladder stones should be removed. If a stone is small, your urologist might recommend you drink a lot of water each day to help you pass the stone during urination. However, because bladder stones are often caused by an inability to empty the bladder completely, spontaneous passage of a stone might be unlikely. Other treatments include:

- **Cystoscopy:** Your urologist might use this procedure to remove small bladder stones. A small tube with a camera at the end (called a cystoscope) is inserted through your urethra and into your bladder to view the stone. A grasper at the end of the cystoscope can catch and retrieve small stones.
- **Cystolitholapaxy:** If a bladder stone is too big to remove with a grasper, this procedure might be used. As with a cystoscopy, a cystoscope is inserted through your urethra and into your bladder to view the stone. Your urologist

then uses a laser, ultrasound or mechanical device to break the stone into small pieces, and flushes the pieces from your bladder.

- **Surgery**: Some large stones require surgery for removal. Your urologist makes an incision in your bladder and removes the stone.

Prevention

To decrease your chance of developing bladder stones:

- Drink plenty of water. Water dilutes the concentration of minerals in your bladder and prevents the formation of bladder stones.
- Irrigate your bladder daily, if your urology health care provider recommends doing so. This helps flush out and reduce the amount of mucus in your bladder. If you've had a bladder augmentation, bladder irrigations need to be part of your daily routine.

Make An Appointment

651-290-8707

Refer a Patient

651-325-2200

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at **651-229-3890**.